PATENT **SPECIFICATION**

612,367



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COMPLETE SPECIFICATION

Improvements in and relating to Collapsible Stools

I, MANUEL ALMEDA LOPES, of 538, Indiana Street, Vallejo, State of California, United States of America, a citizen of the United States of America, 5 do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

My invention relates to improvements in a collapsible stool or the like wherein two separate sets of legs and struts arranged in longitudinal alignment are slidably mounted within a tube having 15 closed ends provided with radial slots slidably engaged by the outer ends of separate sets of legs, the inner ends of each set of legs being pivotally connected to one of a pair of plungers also slidably 20 mounted within said tube, said plungers being arranged to extend the outer ends of its respective set of legs beyond its closed end of the tube, together with means for expanding or spreading the 25 outer ends of said legs when the same are fully projected or extended beyond the end of the tube.

According to the present invention there is provided a collapsible stool with a set of 30 legs at one end and a set of struts at the other end, the legs and struts being connected with plungers movable in the interior of the tube, including longitudinal slots on the tube and closed ends 35 with radial slots therein, the legs and struts being movably connected with the plungers at one end and extending through the radial slots at the opposite ends, rings being slidable on the outer 40 surface of the tube and connected with the plungers through the longitudinal slots to move the plungers respectively within the tube.

In the accompanying drawings:— Figure 1 is an elevation of the stool in collapsed position, one half of same being shown in longitudinal section;

Figure 2 is a top plan view of the device [Price 2|-]

when closed or collapsed;

Figure 3 is a transverse section taken 50 on line 3-3 of Figure 1 in the direction indicated:

Figure 4 is a bottom plan view of the device when closed or collapsed;

Figure 5 is an elevation similar to 55 Figure 1 but with the stool set up for use; and

Figure 6 is a broken detailed view of one of the spring latches for locking the legs in extended position.

Referring to the drawings:

The numeral 1 designates generally a substantially vertical tubular body having spring latches 2 struck up from preferably diametrically opposite sides and adjacent-65 opposite ends of said tube, to engage and lock certain parts hereinafter more fully set forth. Each end of the tube 1 has a closed end 3 provided with radial slots 4, which slots are preferably four in number 70 on the lower and six in number on the upper end, as fully disclosed in Figures 4 and 2, respectively, of the drawings, said lower and upper slots being similar in every respect.

Slidably mounted for longitudinal movement within the tube 1 and near the approximate center thereof and each arranged to move independently of each other to opposite ends of said tube 1, are 80 two plungers 7. A separate set of lower legs or upper struts 8 has the inner ends of said legs or struts pivotally connected to its respective plunger 7 while the outer ends of said legs or struts 8 slidably 85 engage the slots of their respective or adjacent ends 3 of the tube 1, as disclosed in longitudinal section in Figure 1 of the drawings.

Rings 9 are slidably mounted upon the 90 outer end portions of the tube 1, each being attached to one of the plungers 7 by means of screws 11 extending inwardly through preferably diametrically opposed slots 12 in the sides of the tube 1, whereby 95 said plungers 7 may be operated from the

exterior of the device.

A separate, preferably flexible seat pad or cushion 6 having a downwardly extended peripheral pocket 15 is provided 5 to be detachably applied to the expanded or spread ends of the upper struts 8 to complete the seat or stool.

In operation :

When collapsed, the plungers 7 are 10 receded or positioned near the approximate center of the tube 1; so that the sets of legs and struts 8 also are receded and lie in spaced parallel position longitudinally within said tube 1, their outer ends 15 slidably engaging the slots 4 of the ends 3 of said tube 1, as fully disclosed in

Figure 1 of the drawings.

To set up the stool for use, preferably the lower ring 9 is first moved downwardly 20 while the tube 1 is vertically disposed, which action moves its respective plunger i and legs 8 attached thereto until said legs are fully extended below or beyond the lower end 3 of the tube 1, when said 25 legs are automatically spread or expanded at their outer ends by the tension of springs 5 attached to said legs 8 and lower plunger 7. As the lower ring 9 is moved to its extreme low position, the diametric-30 ally opposite spring latches 2 on that end of the tube 1 automatically engage diametrically opposite sides of the ring 9 and effectively lock said ring in extended position, as fully disclosed in the lower 35 end of Figure 5 of the drawings.

With the lower legs 8 thus extended, the device is next set upright on said extended legs and the upper ring 9 is next actuated to move its respective plunger 7 40 to the upper end of the tube I, thereby extending the upper struts 8 in the same manner as above described for the lower legs excepting that the upper struts 8 may be arranged to drop and spread by the attraction of gravity instead of the spring tension above described. The outer ends of the upper struts 8 are thus free to fold

again into partially closed position to facilitate introduction of the said outer ends into the formerly described peri- 50 pheral pocket 15 of the flexible seat 6, as shown in Figure 5 of the drawings.

In this manner, the seat of cushion 6 is effectively held and supported by six struts 8, thereby effecting a more evenly 55. spread or distribution of a person or weight and where it frequently is most needful, as in the case of a corpulent occupant.

In order to fold or collapse the stool 60 compactly for storage or transportation, the above described operation is simply reversed, with the obvious result that the two sets of legs or struts will be receded within the tubular body 1.

Having now particularly described and ascertained the nature of my said inven-

tion and in what manner the same is to be performed, I declare that what I claim

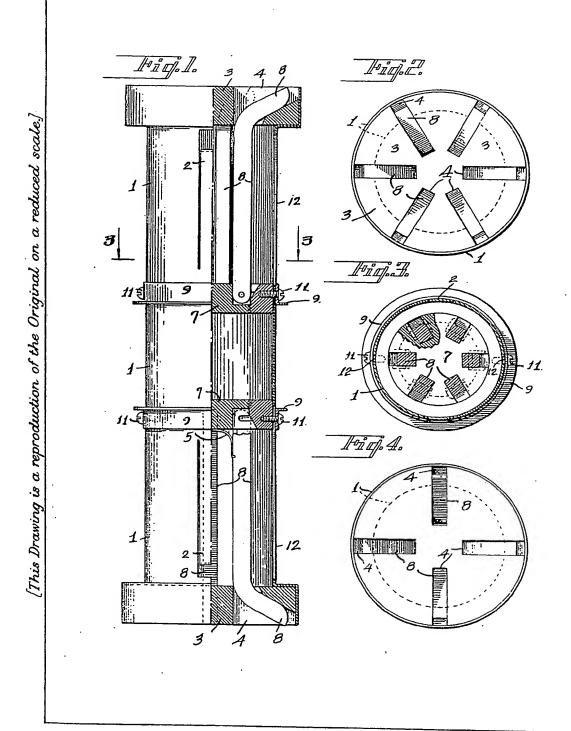
1. A collapsible stool with a set of legs at one end and a set of struts at the other end, the legs and struts being connected with plungers movable in the interior of the tube, including longitudinal slots on the tube and closed ends with radial slots therein, the legs and struts being movably connected with the plunger at one end and extending through the radial slots at the opposite end, rings being slidable on the 80 outer surface of the tube and connected with the plungers through the longitudinal slots to move the plungers respectively within the tube.

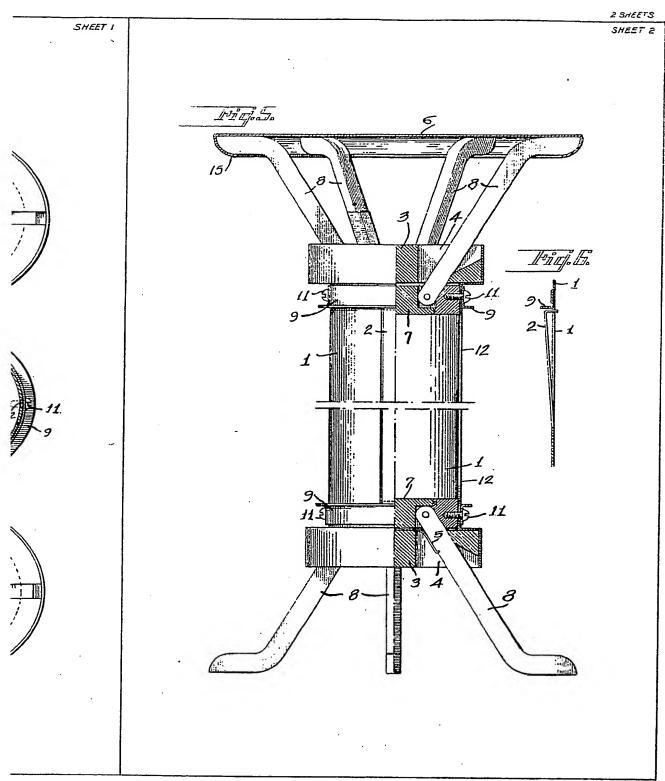
2. A collapsible stool, as claimed in 85 claim 1, in which the closures at the ends of the tube are arranged to spread the outer ends of the legs or struts when they are moved to the closed ends of the tube.

3. A collapsible stool, substantially as 90 described and illustrated, and for the purpose set forth.

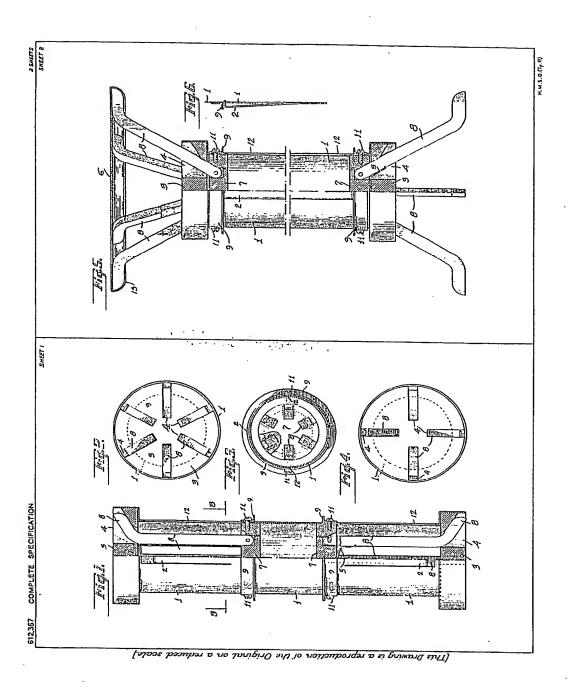
Dated this 21st day of May, 1946. For the Applicant: FRANK B. DÉHN & CO., Chartered Patent Agents. Kingsway House, 103, Kingsway, London, W.C.2.

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